In the Claims

Claims 1 - 10 (Cancelled)

11. (New) A process for improving a fingerprint image comprising:

normalizing an initial image;

determining a useful zone of the image;

cutting the image into a plurality of blocks;

calculating an FFT of each block;

determining frequencies of image blocks based on the FFT;

applying Gabor filters of parameters determined by the frequencies; and

determining orientations of the image based on filtered images derived from the

Gabor filters.

- 12. (New) The process according to claim 11, wherein the blocks comprise overlapping zones.
- 13. (New) The process according to claim 11, wherein the frequencies of the blocks are determined by a highest frequency in a higher energy frequency band.
- 14. (New) The process according to claim 11, wherein determining frequencies of the image blocks further comprises evaluating relevance of the calculation of values of the frequencies.
- 15. (New) The process according to claim 11, wherein determining the orientations of the image further comprises evaluating relevance of calculation of the values of the orientations.
- 16. (New) The process according to claim 14, wherein, in case of irrelevance of one of the frequencies, a frequency is recalculated based on a function of the FFT.
- 17. (New) The process according to claim 16, wherein the irrelevance of one of the frequencies is assessed in relation to a predetermined threshold.

- 18. (New) The process according to claim 11, wherein orientation parameters of the Gabor filters are selected from the group consisting of 0°, 22.5°, 45°, 67.5°, 90°, 112.5°, 135° and 157.5°.
- 19. (New) The process according to claim 11, wherein determining orientations comprises:

reconstituting images based on Gabor filtering of the blocks;

calculating average intensity of each filtered image for zones of a predetermined size;

creating a new image of orientations containing orientation of a block of highest

intensity;

creating a new quality image containing an intensity of the block of the highest intensity; and

filtering of the new quality image of the orientations.

20. (New) The process according to claim 11, further comprising creating a merged final image based on the orientations and binarization and skeletonization of the merged final image.